

Amendments to the Claims

The listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

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1. (original) A method for selecting one channel from a plurality of channels in a wireless network system, the channels including at least one in-use channel, a first idle channel, and a second idle channel, the method comprising:

determining a first reference value for the first idle channel and a second reference value for the second idle channel by comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the frequency band of the second idle channel; and
comparing the first reference value with the second reference value to select one from the first idle channel and the second idle channel.

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2. (original) The method of claim 1, further comprising:

detecting the channels to identify the in-use channel, the first idle channel, and the second idle channel.

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3. (original) The method of claim 1, wherein if the frequency band interval between the in-use channel and the first idle channel is shorter than that between the in-use channel and the second idle channel, the first reference value is larger than the second reference value.

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4. (original) The method of claim 3, wherein the channel selected from the first idle channel and the second idle channel is the one having a smaller reference value.

5. (original) The method of claim 1, wherein if the frequency band interval between the in-use channel and the first idle channel is shorter than the frequency band interval between the in-use channel and the second idle channel, the first reference value is smaller than the second reference value.

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6. (original) The method of claim 5, wherein the channel selected from the first idle channel and the second idle channel is the one having a larger reference value.

7. (original) A method used in a wireless network system, the method comprising:

10 detecting the status of a plurality of channels in the wireless network system to divide the channels into at least one in-use channel, a first idle channel, and a second idle channel; and

15 comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the second idle channel to determine a first reference value for the first idle channel and a second reference value for the second idle channel.

8. (original) The method of claim 7, further comprising:

20 comparing the first reference value with the second reference value to select one from the first idle channel and the second idle channel.

9. (original) The method of claim 8, wherein if the frequency band interval between the in-use channel and the first idle channel is shorter than the frequency band interval between the in-use channel and the second idle channel, the first reference value is larger than the second reference value.

25 10. (original) The method of claim 9, wherein the channel selected from the first idle channel and the second idle channel is the one having a smaller reference value.

11. (original) The method of claim 8, wherein if the frequency band interval between the in-use channel and the first idle channel is shorter than the frequency band interval between the in-use channel and the second idle channel, the first reference value is smaller than the second reference value.
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12. (original) The method of claim 11, wherein the channel selected from the first idle channel and the second idle channel is the one having a larger reference value.
- 10 13. (currently amended) A method for selecting a channel from a plurality of channels in a wireless network system, the channels comprising at least one in-use channel and at least one idle channel, the method comprising:
determining a reference value for each idle channel according to [[the]] a distribution of the at least one in-use channel among the channels; and
15 selecting a channel from the at least one idle channel according to the ~~at least~~ one reference value for each idle channel.
14. (currently amended) The method of claim 13 further comprising:
detecting [[the]] a status of each channel for identifying the in-use channel and
20 the idle channel.
15. (original) The method of claim 13 wherein the reference value is determined by utilizing mathematical calculation.
- 25 16. (original) The method of claim 15 wherein the reference value is determined by a weighted accumulation based on the interval between the idle channel corresponding to the reference value and the at least one in-use channel.

Appl. No. 10/710,817
Amdt. dated October 17, 2007
Reply to Office action of July 17, 2007

17. (original) The method of claim 16 wherein in the reference value determining step, the farther one of the at least one in-use channel to the idle channel corresponding to the reference value is, the less is accumulated to the reference value.
- 5 18. (original) The method of claim 17 wherein in the selecting step, the idle channel corresponding to a reference value with the least weighted accumulation is selected.
- 10 19. (original) The method of claim 16 wherein in the reference value determining step, the farther one of the at least one in-use channel to the idle channel corresponding to the reference value is, the more is accumulated to the reference value.
20. (original) The method of claim 19 wherein in the selecting step, the idle channel corresponding to a reference value with the most weighted accumulation is selected.

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